REMARKS

Claims 1-3, 5, 6, 9, 12-14, 17-22, 24, and 25 are all the claims pending in the application. By this Amendment, Applicant cancels claim 23.

I. Claim Rejections Under 35 U.S.C. § 112(1st):

The Examiner rejects claims 12, 13, and 18-25 under 35 U.S.C. § 112(1st) because the terms "supplying a plurality of supports" (appearing at line 3 of claim 12) and "different dimensions" (appearing at line 3 of claim 12) lack literal support in the originally-filed application. Applicant respectfully disagrees because both of the objectionable limitations are expressly supported by the originally filed disclosure.

The plurality of supports: With reference to Fig. 1, the specification indicates that a feed-out device, which is provided at an upstream side of the production line 10, feeds-out aluminum plates 12 to the production line 10.[1] The aluminum plates 12 serve as the plurality of supports. Furthermore, original claim 12 indicated that "supports" (which is the plural form of the term support) are supplied to the second heating means. Certainly then, the originally filed specification provides express and straightforward support for the term "supplying a plurality of supports."

The different dimensions: As a path of least resistance, and without acquiescing the correctness of the rejection, Applicant amends claim 12 by deleting the term "dimensions" in

[1] Spec., paragraph bridging pages 18-19.

favor of --*thicknesses or widths*--, as suggested by the Examiner. Notwithstanding, Applicant respectfully submits that the specification provides straightforward and explicit support for the objectionable term "different dimensions." For example, and with respect to a third aspect of the invention, the specification explains that because the condition of heating by the second heating means can be changed quickly in accordance with changes in the "dimensions of the supports," even if the "dimension of the supports" which are being conveyed continuously vary, the final temperatures of the photosensitive coated layers can be accurately controlled without varying the conveying speed of the supports.[2] Further, and with reference to Fig. 1, the specification indicates that when the computing processing device 66 recognizes that the "dimension" of the aluminum plate 12 has changed, the computing processing device 66 changes the amount of heat radiated from the heater 54 in accordance with the "difference in the dimensions" between the aluminum plates 12.[3] Original claim 13 also indicated that the supplied heat is controlled in accordance with changes in "dimensions of the supports."

For these reasons, Applicant respectfully asserts that each limitation set forth in claim 12 is expressly supported in the originally filed disclosure, thereby satisfying the written description requirement of 35 U.S.C. § 112(1st). The Examiner is therefore respectfully requested to reconsider and withdraw this rejection.

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[2] Spec., page 12, first full paragraph.

[3] Spec., paragraph bridging pages 29-30.

The Examiner also alleges that the features set forth in claim 23 lack literal support in the originally filed application. Without acquiescing that the Examiner's rejection is correct, Applicant cancels claim 23 as a path of least resistance, thereby rendering the raised rejection moot.

II. Claim Rejections Under 35 U.S.C. § 112(2nd):

The Examiner rejects claims 12, 13, 18-22, 24, and 25 under 35 U.S.C. § 112(2nd), because claim 12 recites several terms that lack antecedent basis. To address the Examiner's concerns, Applicant amends claim 12 by deleting the term "support" in favor of --*supports*--, deleting the term "the thicknesses" in favor of --*thicknesses*--, and deleting the term "the widths" in favor of the term --*widths*--.

Applicant respectfully asserts that the amended claims more particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming all of the raised rejections under 35 U.S.C. § 112(2nd).

III. Allowable Subject Matter:

The Examiner continues to indicate that claim 12 recites allowable subject matter. Applicant respectfully asserts that the rejections of claim 12 under 35 U.S.C. § 112(1st and 2nd) is incorrect for the reasons discussed above in sections I and II. Therefore, the Examiner should allow claim 12 in the next Patent Office paper. The Examiner should also allow claims 13, 18-22, 24, and 25 since these claims depend from allowable claim 12.

IV. Claim Rejections on Prior Art Grounds:

The Examiner rejects claims 1-3, 6, and 9 under 35 U.S.C. § 103(a) as being obvious over U.S. 5,077,912 to Ogawa et al. ("Ogawa") in view of U.S. 5,675,913 to Matsuda et al. ("Matsuda"); claims 5 and 14 under 35 U.S.C. § 103(a) as being obvious over Ogawa in view of Matsuda, in further view of U.S. 5,380,612 to Kojima et al. ("Kojima"); and claim 17 under 35 U.S.C. § 103(a) as being obvious over Ogawa in view of Matsuda, in further view of U.S. 6,270,938 to Gandini et al. ("Gandini"). Applicant respectfully traverses these rejections in view of the following remarks.

Claim 1, which is amended for clarification, defines a method that involves heating the support in the photosensitive coated layer by a second heating means, *which does not contact the support and the photosensitive coated layer*. Exemplary embodiments of this feature are discussed throughout the specification. For example, the specification indicates that the support and the photosensitive coated layer can be heated by the second heating means without being contacted.[4] Further, from the standpoint of preventing scratches in the reverse surface of the support, a "non-contact system," such as a hot air system, a heat radiation system, an induction heating system, or the like is used as a second heating means.[5] At least this feature, in combination with the other limitations recited in claim 1, is not taught or suggest by the prior art relied upon in the grounds of rejection.

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[4] Spec., page 6, first full paragraph.

[5] Spec., paragraph bridging pages 7-8.

The grounds of rejection rely upon the primary reference to Ogawa to teach all of the features of the present invention, except for changing a condition of heating of the second heating means while the support is being conveyed. In so doing, the grounds of rejection compare Ogawa's heating roller 9 to the second heating means of the present invention. This rejection position is incorrect for the following reasons.

With reference to Fig. 1 of Ogawa, the disclosed device does include a heating roller 9, which is located at a downstream position with respect to a hot air drying apparatus 8. As clearly shown in Fig. 1, however, the heating roller 9 directly touches the web 1. Ogawa's use of the heating roller 9 (and the direct contact feature between the heating roller 9 and the web 1) is not incidental. In fact, Ogawa provides a laundry list of advantages associated with the heating roller 9. This list includes (among other things) the occurrence of little temperature distribution in the cross direction, less adverse effects such as fogging and the reduction of membrane strength, an improved drying capacity, a shorter drying time, a reduction in size of the drying apparatus, an elevated coating speed, and a minimization of the difference in the thickness of the webs and the difference in the quality in the cross direction.[6] Certainly then, Ogawa does not teach or suggest a second heating means, *which does not contact the support and the photosensitive coated layer,* as required by claim 1.

Applicant respectfully asserts that the secondary references relied upon in the grounds of rejection do not make up the deficiencies of Ogawa noted above. Consequently, even if

[6] Ogawa, col. 2, l. 25-39.

combined in the manner suggested by the grounds of rejection, the prior art would still not meet all of the limitations recited in independent claim 1.

Further bolstering Applicants traversal position is the fact that the objective of Ogawa is to decrease the amount of remaining solvent, utilizing the high heat-transfer efficiency of a contact method (heating roller). Ogawa neither refers to the defects of the contact method (e.g., blemishes on the rear surface), nor suggests alternatives such as a non-contact method. Ogawa teaches that variation in the degree of drying can be eliminated in the final step of the drying process by contact with a heating roller, which is set at a constant temperature. There is no teaching in Ogawa of eliminating drying degree fluctuation by adjusting the heating condition of the supports relative to the thickness of a plate.

The present invention differs greatly from the prior art in the sense that the defects of the contact method, such as the aforementioned blemishes, are eliminated by use of the non-contact method. Furthermore, quick adjustments to the drying conditions that can not be attained with a heating roller, which has a high heat capacity, can be attained with the supports of the present invention.

The present invention also differs from the prior art in that a plurality of heating devices are disposed linearly (claim 13) in order to control not only the temperature at the final stage, but also the temperature throughout the entire drying process. The structure of the present invention eliminates the need for a device that controls the temperature instantly at the final stage. Hence, the present invention clearly possesses novelty over the prior art.

Regarding Matsuda, this cited reference relates to a stand-by period of a processor. Furthermore, the contact method (heating roller) is used, and thus the technical field of the Matsuda reference is in sharp contrast to that of the present invention. Moreover, the cited reference differs not only in its objective, but also in its method and effect. There are no citations in Matsuda that suggest the advantages of using the non-contact method for drying a printing plate, as recited in the present invention.

Accordingly, even a person skilled in the art would not have been motivated to combine the related prior art, over which the present invention is clearly novel, with the roller of an automatic processor, which belongs to a different technical field.

For these reasons, Applicant respectfully asserts that claim 1 is patentable, and that claims 2, 3, 5, 6, 9, 14, and 17 are patentable at least by virtue of their dependencies.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Ray Heflin
Registration No. 41,060

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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PATENT TRADEMARK OFFICE

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 23 is canceled.

The claims are amended as follows:

1. (Twice Amended) A method for manufacturing a lithographic printing plate, the method comprising:

conveying a support, on which a photosensitive coating solution containing an organic solvent is coated such that a photosensitive coated layer is formed by the photosensitive coating solution;

drying the photosensitive coated layer by a first heating means to a dry-to-touch state;

heating the support and the photosensitive coated layer by a second heating means, which does not contact the support and the photosensitive coated layer, and which is provided at a downstream side of the first heating means, so that hardening of the photosensitive coated layer is promoted; and

changing a condition of heating of the second heating means while the support is being conveyed.

12. (Twice Amended) A method for manufacturing a lithographic printing plate, the method comprising:

supplying a plurality of supports that have different ~~dimensions~~thicknesses or widths,~~each of~~ the supports being coated with a photosensitive coating solution containing an organic solvent such that ~~a~~ photosensitive coated ~~layer is~~layers are respectively formed by the photosensitive coating solution;

drying the photosensitive coated ~~layer~~layers by a first heating means to a dry-to-touch state;

heating the ~~support~~supports and the photosensitive coated ~~layer~~layers by a second heating means provided at a downstream side of the first heating means so that hardening of the photosensitive coated ~~layer~~layers is promoted;

changing a condition of heating the supports and the photosensitive coated layers by the second heating means in accordance with ~~the~~ thicknesses ~~and the~~ or widths of the supports.

13. (Amended) A method for manufacturing a lithographic printing plate according to claim 12, wherein the second heating means is a plurality of drying devices which are disposed along a conveying path of the ~~support~~supports, and amounts of heat supplied by the plurality of heating devices are respectively controlled in accordance with changes in dimensions of the supports.

18. (Amended) A method for manufacturing a lithographic printing plate according to claim 12, wherein the first heating means heats the photosensitive coated ~~layer~~layers to 90°C or more.

19. (Amended) A method for manufacturing a lithographic printing plate according to claim 12, wherein the first heating means dries the photosensitive coated ~~layer~~layers such that a remaining amount of the organic solvent in the photosensitive coated ~~layer~~layers is 5 wt% or less of the photosensitive coated ~~layer~~layers.

22. (Amended) A method for manufacturing a lithographic printing plate according to claim 12, wherein the condition of heating by the second heating means is controlled in accordance with a type of the photosensitive coated ~~layer~~layers formed on the ~~support~~supports, such that a temperature of the photosensitive coated ~~layer~~layers immediately after heating by the second heating means is a predetermined temperature which is set in accordance with the type of the photosensitive coated ~~layer~~layers.

24. (Amended) A method for manufacturing a lithographic printing plate according to claim 12, wherein after hot air drying of the photosensitive coated ~~layer~~layers by the first heating means, the second heating means radiates mid-infrared radiation or far infrared radiation to the photosensitive coated ~~layer~~layers and the ~~support~~supports so as to heat the ~~support~~supports and the photosensitive coated ~~layer~~layers.

25. (Amended) A method for manufacturing a lithographic printing plate according to claim 12, further comprising, at a down stream side of the cooling step, a step of forming ~~an~~ overcoat ~~layer~~layers on the photosensitive coated ~~layer~~layers.